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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,812	06/28/2001	Kevin D. Kissell	MIPS:0103.01US	4118

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EXAMINER	
CAO, CHUN	
ART UNIT	**PAPER NUMBER**
2115	4

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/894,812	Applicant(s) KISSELL, KEVIN D.	
	Examiner Chun Cao	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 14-40* is/are rejected.

7)☒ Claim(s) *10-13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-40 are presented for examination.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

Specification

3. The disclosure is object to because of the following informalities: the specification must identify any related application/patens by the serial number (not by the Attorney's Docket number and any other number) or patent number, if patented. Please make sure that the related information is up to date. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Such that "an media processing unit unit" should be –a media processing unit-.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-3, 5-9, 14-40 are rejected under 35 U.S.C. 102(a) as being anticipated by Goodnow et al. (Goodnow), U.S. patent no. 6,140,836.

As per claim 1, Goodnow discloses an apparatus within a processing system having multiple subsystems, for disassociating the power consumed by the processing system with instructions it is executing [fig. 1], the apparatus comprising:

a power prediction system for providing a predictor of estimated power that will be consumed during execution of the instructions [col. 5, line 45-col. 6, line 6; col. 6, lines 47-55]; and

a subsystem inhibition control coupled to said power prediction system for receiving said predictor and for turning on/off selected ones of the subsystems based on the value of said predictor [col. 4, lines 48-55];

wherein by turning on/off ones of the selected subsystems, said subsystem inhibition of the processing system to be disassociated with the instructions it is executing [col. 6, lines 47-67; col. 7, lines 23-25; col. 8, lines 35-40].

As per claim 2, Goodnow discloses that power prediction system comprises:

a power profile table having a plurality of power consumption entries, said entries corresponding to types of instructions that may be executed by the processing system [col. 5, lines 46-51].

As per claim 3, Goodnow discloses that each of power consumption entries comprises a plurality of power consumption values, said values corresponding to a predicted power consumption of an instruction within particular processing stages of the processing system [col. 5, lines 45-59].

As per claim 5, Goodnow discloses that subsystem inhibition control comprises:

selection control for determining which of the subsystems are available to be turned off; and the subsystem power profiles coupled to said selection control for specifying an estimated power consumption for each of the subsystems [fig. 1; col. 6, lines 47-67; col. 7, lines 23-25].

As per claim 6, Goodnow discloses that selection control utilizes said estimated power consumption for each of the subsystems to determine which, if any, of the subsystem to turn on/off [fig. 1; col. 6, lines 47-67; col. 7, lines 23-25].

As per claim 7, inherently, Goodnow discloses that selection control turns on/off ones of the subsystems via inhibit/burn signal line [fig. 1; col. 6, lines 47-67; col. 7, lines 23-25].

As per claim 8, Goodnow discloses that the subsystem inhibition control turns on/off selected ones o f the subsystem to cause the total power consumption of the processing system to remain the same regardless of which instruction are executing on the processing system [fig. 1; col. 6, lines 47-67; col. 7, lines 23-25].

As per claim 9, Goodnow discloses that the subsystem inhibition control turns on/off selected ones o f the subsystem to cause the total power consumption of the processing system to be random [variable] regardless of which instruction are executing on the processing system [fig. 1; col. 6, lines 47-67; col. 7, lines 1-17, 23-25].

8. As to claims 14-23 are written in mean plus functions and contained same limitations as claims 1-3 and 5-9. Therefore, same rejection is applied.

9. As per claim 24, Goodnow discloses an apparatus within a processing system having multiple subsystems, for randomizing the total power consumed within the processing device [fig. 1], the apparatus comprising:

a random value generator for generating a random value as instructions are executed by the processing device [col. 5, line 45-col. 6, line 6; col. 7, lines 1-11]; and

a subsystem inhibition control coupled to said random value generator for turning on/off selected ones of the multiple subsystems [fig. 1; col. 4, lines 48-55];

wherein said subsystem inhibition control disassociated said instructions that are executed from power consumed by the processing device during their execution [col. 6, lines 47-67; col. 7, lines 1-17, 23-25; col. 8, lines 35-40].

As per claim 25, Goodnow discloses that random value generator generates said random value between predetermined minimum and predetermined maximum values [col. 7, lines 1-11].

As per claim 26, Goodnow discloses that a total power predictor coupled to said subsystem inhibition control for providing an estimated total power value to said subsystem inhibition control [fig. 1; col. 5, line 45-col. 6, line 6; col. 6, lines 47-55].

As per claim 27, Goodnow discloses that subsystem inhibition control utilizes said estimated total power value so that the total power consumed by the processing device does not exceed a predetermined threshold [col. 6, lines 47-65].

10. As to claims 28-34, Goodnow teaches the claimed system. Therefore, Goodnow teaches the claimed computer program product for carrying out the system.

As to claims 35-37, basically are the corresponding elements that are carried out

the method of operating steps in claims 35-37. Goodnow teaches the claimed system. Accordingly, Goodnow teaches the claimed method of steps for carrying out the system.

As to claims 38-40, Goodnow teaches the claimed system. Therefore, Goodnow teaches the claimed computer readable medium for carrying out the system.

Claim Rejections - 35 USC § 103

11. Claims 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodnow et al. (Goodnow), U.S. patent no. 6,140,836as applied to claim1 above, and further in view of Bertin et al. (Bertin), U.S. patent no. 6,345,362.

As per claim 4, Bertin discloses that the multiple subsystems comprise a floating point unit [col. 2, lines 12-20]. Official Notice is taken that a media processing unit is old and well known in the media processing art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to including a floating point unit or a media processing unit for dedicating floating point arithmetic function or media function because this would improve the functionality of Goodnow system.

Allowable Subject Matter

12. Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jimbo et al., US patent no. 6,173,408, teaches of comparing predicted power

consumption with maximum power consumption within an instruction processing system.

Oprescu et al., US patent no, 5,842,027 teaches of comparing total amount of power drawn by all devices with the maximum amount of power available; and denying the power usage request for a device if an insufficient amount of power is available.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

Chun Cao

Aug. 6, 2004